February 2, 2009

Charles L.A. Terreni
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of December 2008.

Sincerely,

/s/

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Enclosures
45612

c: John Flitter (ORS)

December 2008

The following units had no off-line outages during the month of December:

Brunswick Unit 1
Brunswick Unit 2
Harris Unit 1
Mayo Unit 1
Roxboro Unit 3
Roxboro Unit 4

December 2008

Robinson Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 5:51 on November 17, and was returned to service at 17:51 on December 1, a duration of 348 hours. The unit was offline for 17 hours and 51 minutes during the month of December.

B. Cause: Excessive Turbine Vibration

C. Explanation: Following return to service from the planned refueling outage, turbine vibrations were higher than expected, but were capable of being managed through operator actions. Turbine vibrations increased beyond operator control, and the operators manually shut down the unit on November 17 in accordance with Abnormal Operating Procedures. The following possible causes of the vibration were investigated and addressed: 1) shims under the exciter base required adjustment; 2) the new exciter gusset plate may have had a soft foot condition; and 3) as a result, the refurbished generator hydrogen seals experienced a seal rub.

D. Corrective Action: The shims were adjusted, additional gusset plates were installed, and the generator hydrogen seals were replaced. Upon completion of corrective maintenance activities, the unit was returned to service.

Full Scheduled Outage

A. Duration: The unit was taken out of service at 00:45 on December 20, and was returned to service at 23:23 on December 20, a duration of 22 hours and 38 minutes.

B. Cause: Excessive Turbine Vibration

C. Explanation: Following completion of the scheduled refueling outage and the subsequent forced outage, higher than normal main turbine vibrations continued. Vibration monitoring equipment revealed increasing vibrations on the #7 bearing (generator bearing, low-pressure turbine end) and the #9 bearing (exciter outboard bearing). To proactively prevent damage, a planned outage was scheduled to address the vibrations.

D. Corrective Action: Balance shots were installed near the #9 bearings and the exciter foundation fastener was torqued. Other maintenance activities were prepared, including a Furmanite repair on the high pressure turbine horizontal joint. Upon completion of maintenance activities, the unit was returned to service.

December 2008

Roxboro Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 13:43 on December 4, and was returned to service at 7:21 on December 5, a duration of 17 hours and 38 minutes.

B. Cause: Feedwater Line Rupture

C. Explanation: The unit was forced offline due to a rupture in a feedwater regulator line.

D. Corrective Action: Corrective maintenance activities were conducted to repair the rupture in the feedwater line. Upon completion of repairs, the unit was returned to service.

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	938	MW	938	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	712,475	MWH	7,030,632	MWH	2
Capacity Factor	102.09	%	85.33	%	
Equivalent Availability	99.53	%	84.18	%	
Output Factor	102.09	%	100.48	%	
Heat Rate	10,327	BTU/KWH	10,402	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,148,956	13.94	3
Partial Scheduled	713	0.10	58,345	0.71	4
Full Forced	0	0.00	93,206	1.13	5
Partial Forced	2,578	0.37	32,605	0.40	6
Economic Dispatch	0	0.00	31	0.00	7
Possible MWH	697,872		8,239,392		8

* See 'Notes for Nuclear Units' filed with the January 2008 report.
** Gross of Power Agency

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	937	MW	937	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	704,777	MWH	7,854,238	MWH	2
Capacity Factor	101.10	%	95.43	%	
Equivalent Availability	99.95	%	95.11	%	
Output Factor	101.10	%	99.22	%	
Heat Rate	10,497	BTU/KWH	10,602	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	331	0.05	21,821	0.27	4
Full Forced	0	0.00	314,426	3.82	5
Partial Forced	0	0.00	95,551	1.16	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	697,128		8,230,608		8

* See 'Notes for Nuclear Units' filed with the January 2008 report.
** Gross of Power Agency

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	900	MW	900	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	691,631	MWH	7,821,411	MWH	2
Capacity Factor	103.29	%	98.94	%	
Equivalent Availability	100.00	%	97.09	%	
Output Factor	103.29	%	101.82	%	
Heat Rate	10,644	BTU/KWH	10,781	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	1,093	0.01	4
Full Forced	0	0.00	224,235	2.84	5
Partial Forced	0	0.00	8,939	0.11	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	669,600		7,905,600		8

* See 'Notes for Nuclear Units' filed with the January 2008 report.
** Gross of Power Agency

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	710	MW	710	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	524,457	MWH	5,427,296	MWH	2
Capacity Factor	99.28	%	87.02	%	
Equivalent Availability	92.41	%	83.25	%	
Output Factor	105.00	%	103.56	%	
Heat Rate	10,598	BTU/KWH	10,778	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	16,069	3.04	748,860	12.01	3
Partial Scheduled	8,081	1.53	45,471	0.73	4
Full Forced	12,674	2.40	247,080	3.96	5
Partial Forced	3,251	0.62	3,512	0.06	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	528,240		6,236,640		8

* See 'Notes for Nuclear Units' filed with the January 2008 report.

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	742	MW	742	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	371,662	MWH	4,079,730	MWH	2
Capacity Factor	67.32	%	62.59	%	
Equivalent Availability	98.38	%	95.23	%	
Output Factor	67.32	%	64.62	%	
Heat Rate	10,441	BTU/KWH	10,692	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	81,830	1.26	3
Partial Scheduled	8,842	1.60	99,021	1.52	4
Full Forced	0	0.00	79,381	1.22	5
Partial Forced	124	0.02	50,970	0.78	6
Economic Dispatch	171,420	31.05	2,126,795	32.63	7
Possible MWH	552,048		6,517,728		8

* See 'Notes for Fossil Units' filed with the January 2008 report.
** Gross of Power Agency

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	671	MW	671	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	404,233	MWH	4,611,245	MWH	2
Capacity Factor	80.97	%	78.24	%	
Equivalent Availability	94.40	%	91.32	%	
Output Factor	82.94	%	85.57	%	
Heat Rate	8,272	BTU/KWH	9,089	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	330,713	5.61	3
Partial Scheduled	0	0.00	29,837	0.51	4
Full Forced	11,832	2.37	117,536	1.99	5
Partial Forced	16,143	3.23	33,658	0.57	6
Economic Dispatch	67,016	13.42	771,075	13.08	7
Possible MWH	499,224		5,894,064		8

* See 'Notes for Fossil Units' filed with the January 2008 report.

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	705	MW	705	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	365,789	MWH	4,087,447	MWH	2
Capacity Factor	69.74	%	66.00	%	
Equivalent Availability	92.37	%	89.19	%	
Output Factor	69.74	%	70.99	%	
Heat Rate	10,607	BTU/KWH	11,156	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	425,444	6.87	3
Partial Scheduled	36,235	6.91	106,243	1.72	4
Full Forced	0	0.00	4,559	0.07	5
Partial Forced	3,799	0.72	133,212	2.15	6
Economic Dispatch	118,697	22.63	1,435,815	23.19	7
Possible MWH	524,520		6,192,720		8

* See 'Notes for Fossil Units' filed with the January 2008 report.

	Month of December 2008		Twelve Month Summary		See Notes*
MDC	698	MW	698	MW	1
Period Hours	744	HOURS	8,784	HOURS	
Net Generation	377,803	MWH	4,311,394	MWH	2
Capacity Factor	72.75	%	70.32	%	
Equivalent Availability	100.00	%	96.15	%	
Output Factor	72.75	%	72.70	%	
Heat Rate	10,858	BTU/KWH	10,517	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	62,005	1.01	3
Partial Scheduled	0	0.00	82,107	1.34	4
Full Forced	0	0.00	21,813	0.36	5
Partial Forced	0	0.00	69,859	1.14	6
Economic Dispatch	141,509	27.25	1,584,054	25.84	7
Possible MWH	519,312		6,131,232		8

* See 'Notes for Fossil Units' filed with the January 2008 report.
** Gross of Power Agency

Run Date 1/15/2009

Plant	Unit	Current MW Rating	January 2007 - December 2007	December 2008	January 2008 - December 2008
Asheville	1	191	63.64	61.37	67.84
Asheville	2	185	73.17	68.87	64.83
Cape Fear	5	144	78.67	69.51	69.98
Cape Fear	6	172	72.38	59.20	61.62
Lee	1	74	62.15	72.62	62.88
Lee	2	77	62.47	48.26	50.49
Lee	3	248	66.38	50.98	38.21
Mayo	1	742	72.10	67.32	62.59
Robinson	1	176	74.63	64.55	65.88
Roxboro	1	369	78.01	36.25	69.79
Roxboro	2	671	80.06	80.97	78.24
Roxboro	3	705	74.37	69.74	66.00
Roxboro	4	698	62.40	72.75	70.32
Sutton	1	93	56.26	31.81	46.46
Sutton	2	102	63.19	41.44	55.49
Sutton	3	403	55.53	47.32	56.73
Weatherspoon	1	48	53.86	29.11	42.83
Weatherspoon	2	49	55.68	28.29	41.04
Weatherspoon	3	76	68.70	47.23	56.58
Fossil System Total		5,223	69.82	62.80	64.48
Brunswick	1	938	95.92	102.09	85.33
Brunswick	2	937	86.99	101.10	95.43
Harris	1	900	93.90	103.29	98.94
Robinson Nuclear	2	710	92.26	99.28	87.02
Nuclear System Total		3,485	92.25	101.56	91.90
Total System		8,708	78.79	78.31	75.45

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period April 1, 2008 through December 31, 2008, actual period to date performance is summarized below:

Period to Date: April 1, 2008 to December 31, 2008

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	20,811,720 MWH
B. Total number of hours during SCPSC test period	B =	6,601 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,485 MW
D. Reasonable nuclear system reductions (see page 2)	D =	2,516,968 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 101.4%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: April 1, 2008 to December 31, 2008

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	937 MW	900 MW	710 MW	3,485 MW
Reasonable refueling otuage time (MWH)	644,015	0	0	732,791	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	224,462	284,504	229,188	271,491	
Reasonable coast down power reductions (MWH)	0	0	0	9,720	
Reasonable power ascension power reductions (MWH)	42,784	31,466	0	21,070	
Prudent NRC required testing outages (MWH)	3,866	15,466	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	6,145	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	915,127	337,581	229,188	1,035,072	
Total reasonable outage time exclusions [carry to Page 1, Line D]					2,516,968